- 1. (Currently amended) A microfluidic device in the form of a disc comprising one, two or more MS-ports for the presentation of an MS-analyte to an EDI-MS apparatus, wherein each of said MS-ports being part of a microchannel structure comprising an inlet port for a sample, wherein each of said microchannel structures are oriented radially in the disc and arranged annularly around a spinning axis of the disc; and comprising an area (EDI area) for presenting the MS-analyte to a mass spectrometer, said EDI area comprising a layer I of conducting material having a conductive connection and/or a calibrator area in the proximity of the MS-port.
- 2. (Currently amended) The microfluidic device of claim 1, wherein there are two or more EDI areas and layer (I) of each EDI area is part of a common continuous conducting layer.
- 3. (Currently amended) The microfluidic device of claim 1, wherein layer (I) is covered by a non-conducting layer (layer II).
- 4. (Currently amended) The microfluidic device of claim 3, wherein there are two or more EDI areas and layer (II) of each EDI area is part of a common continuous non-conducting layer.
- 5. (Currently amended) The microfluidic device of claim 1, wherein layer (I) is exposed in the MS-port at the surface of the EDI area, or embedded in the EDI area below said surface, or exposed at the bottom of the device.
- 6. (Currently amended) The microfluidic device of claim 1, wherein the microchannel structures are covered by a lid which may or may not have an opening above an EDI area.
- 7. (Currently amended) The microfluidic device of claim 6, wherein said lid is removable.
- 8. (Currently amended) The microfluidic device of claim 6, wherein said lid comprises a common conducting layer including the connection for electricity and an opening above each of the EDI areas.

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- 10. (Currently amended) The microfluidic device of claim 1, wherein the sample inlet port is at an inner position and the MS-port is at an outer position in each of said microcharmel structures.
- 11. (Currently amended) The microfluidic device of claim 1, wherein EDI is LDI.
- 12. (New) The microfluidic device of claim 11, wherein LDI is MALDI.